



Subsidiary Body for Implementation

Thirty-ninth session

Warsaw, 11–16 November 2013

Item 11 of the provisional agenda

Approaches to address loss and damage associated with climate change impacts in developing countries that are particularly vulnerable to the adverse effects of climate change to enhance adaptive capacity¹

Report on the expert meeting to consider future needs, including capacity needs associated with possible approaches to address slow onset events

Note by the secretariat

Summary

This report provides a summary of the expert meeting to consider future needs, including capacity needs associated with possible approaches to address slow onset events, held in Nadi, Fiji, from 12 to 14 September 2013. The discussions at the meeting focused on: needs relating to data, information and knowledge aspects of addressing slow onset events; needs relating to support, including finance, technology and capacity-building; and coordination needs at various levels in addressing slow onset events. This report also includes a summary of potential responses, to be undertaken by and outside of the UNFCCC, to some of the key needs regarding slow onset events discussed at the meeting.

¹ Decision 1/CP.16, paragraphs 26–29.

Contents

	<i>Paragraphs</i>	<i>Page</i>
I. Introduction	1–9	3
A. Mandate	1–2	3
B. Scope of the note	3–4	3
C. Possible action by the Subsidiary Body for Implementation	5	3
D. Background	6–9	3
II. Proceedings	10–17	5
III. Summary of future needs and key issues addressed at the meeting	18–47	6
A. Introduction	20–23	6
B. Needs relating to data, information and knowledge aspects of possible approaches to address slow onset events	24–30	7
C. Needs relating to support aspects, including finance, technology and capacity-building, of possible approaches to address slow onset events	31–39	10
D. Coordination needs at various levels in addressing slow onset events	40–47	12
IV. Summary of the potential responses that can be undertaken under and outside of the UNFCCC process	48–70	14
A. Potential responses to be undertaken by entities and within processes outside of the UNFCCC process	50–55	14
B. Potential responses to be undertaken by the UNFCCC process	56–70	15
V. Concluding remarks	71	19

I. Introduction

A. Mandate

1. The Subsidiary Body for Implementation (SBI), at its thirty-seventh session, and the Conference of the Parties (COP), at its eighteenth session, requested the secretariat to organize an expert meeting, to be held before SBI 39, to consider future needs, including capacity needs associated with possible approaches to address slow onset events.²
2. The COP also requested the secretariat to prepare a report on that expert meeting and to make it available for consideration by SBI 39.³

B. Scope of the note

3. This report draws on the presentations made and discussions held at the expert meeting, and contains:⁴
 - (a) A description of the meeting proceedings (chapter II);
 - (b) A summary of future needs and key issues addressed during the meeting (chapter III);
 - (c) A summary of key potential responses that could be undertaken under and outside of the UNFCCC process in addressing future needs related to possible approaches to address slow onset events (chapter IV);
 - (d) A summary of emerging areas of convergence (chapter V).
4. It aims to capture the main relevant needs and potential responses that were put forward at the meeting, including those that were not necessarily agreed upon or supported by all participants.

C. Possible action by the Subsidiary Body for Implementation

5. The SBI may wish to consider this report, together with the outcomes of other intersessional activities, in its general consideration of the implementation of the work programme on loss and damage.

D. Background

6. COP 16 adopted the Cancun Adaptation Framework, as part of the Cancun Agreements, in order to enhance action on adaptation.⁵ Under the Cancun Adaptation Framework, the COP established a work programme⁶ to consider approaches to address loss and damage associated with climate change impacts in developing countries that are particularly vulnerable to the adverse effects of climate change (the work programme on

² Decision 3/CP.18, paragraph 10(a).

³ As footnote 3 above.

⁴ The relevant documentation related to the expert meeting is available on the UNFCCC website at <<http://unfccc.int/7705>>.

⁵ Decision 1/CP.16, paragraph 13.

⁶ Decision 1/CP.16, paragraph 26.

loss and damage).⁷ In addition, the COP requested the SBI to agree on the activities to be undertaken under that work programme⁸ and to make recommendations on loss and damage for the consideration of COP 18.

7. The elements for consideration in the context of the work programme on loss and damage include the following:

- (a) Possible development of a climate risk insurance facility to address impacts associated with severe weather events;
- (b) Options for risk management and reduction, risk sharing and transfer mechanisms such as insurance, including options for microinsurance, and resilience-building, including through economic diversification;
- (c) Approaches for addressing rehabilitation measures associated with slow onset events;
- (d) Engagement of stakeholders with relevant specialized expertise.

8. The following three broad thematic areas were agreed upon at SBI 34 in implementing the work programme on loss and damage:⁹

- (a) Assessing the risk of loss and damage associated with the adverse effects of climate change and the current knowledge on the same;
- (b) A range of approaches to address loss and damage associated with the adverse effects of climate change, including impacts related to extreme weather events and slow onset events, taking into consideration experience at all levels;
- (c) The role of the Convention in enhancing the implementation of approaches to address loss and damage associated with the adverse effects of climate change.

9. Taking into consideration the outcomes of the implementation of the work programme on loss and damage so far, COP 18, inter alia:

- (a) Agreed that comprehensive, inclusive and strategic responses are needed to address loss and damage associated with the adverse effects of climate change;¹⁰
- (b) Identified areas in which all Parties to enhance action on addressing loss and damage associated with the adverse effects of climate change,¹¹ and areas in which further efforts are required to advance the understanding of and expertise on loss and damage;¹²
- (c) Decided to establish, at COP 19, institutional arrangements, such as an international mechanism, including functions and modalities, to address loss and damage associated with climate change impacts in developing countries that are particularly vulnerable to the adverse effects of climate change;¹³
- (d) Agreed on interim activities to be undertaken prior to SBI 39.¹⁴

⁷ Decision 7/CP.17, paragraph 1.

⁸ Decision 1/CP.16, paragraph 27.

⁹ FCCC/SBI/2011/7, paragraph 109.

¹⁰ Decision 3/CP.18, paragraph 4.

¹¹ Decision 3/CP.18, paragraph 6.

¹² Decision 3/CP.18, paragraph 7.

¹³ Decision 3/CP.18, paragraph 9.

¹⁴ Decision 3/CP.18, paragraph 10.

II. Proceedings

10. The expert meeting to consider future needs, including capacity needs associated with possible approaches to address slow onset events, mandated under the work programme on loss and damage, took place in Nadi, Fiji, from 12 to 14 September 2013. It was organized by the secretariat in collaboration with the Ministry of Foreign Affairs and International Cooperation of Fiji. The Government of Japan provided financial support for the organization of the meeting. At the request of the Chair of the SBI, Mr. Tomasz Chruszczow, the meeting was co-chaired by Ms. Angela Churie-Kallhauge (Sweden) and Mr. Juan Hoffmaister (Bolivia (Plurinational State of)) on his behalf.

11. The meeting was attended by 87 representatives of Parties, United Nations agencies, international, regional and national organizations, civil society, and research and academic institutions active at all levels in the areas of adaptation and climate-related disaster risk reduction and disaster risk management, including data and climate services and financial, sectoral and developmental aspects. An advance unedited version of the technical paper on non-economic losses, which provides a literature review and critical analysis of relevant issues, was made available at the meeting.¹⁵

12. Following the opening of the meeting and the welcome address by Mr. Ratu Inoke Kubuabola, Minister for Foreign Affairs and International Cooperation, Fiji, an introductory session (session 1) consisting of two parts took place: the first part provided an overview of the deliberations under the UNFCCC on loss and damage and a brief introduction to the risk landscape related to different types of slow onset climatic events and impacts; in the second part participants shared their expectations and the outcomes of the meeting.¹⁶

13. Subsequently, three focused sessions took place (sessions 2–4). The aim of session 2 was to enhance understanding of future needs of developing countries in terms of possible approaches to address slow onset events. The session comprised three parts: the first part, through four presentations made in the plenary, provided insights into some of the current approaches to addressing different types of slow onset events and their impacts at the national level as well as from the perspective of climate-resilient development and food security. In addition, an example was highlighted of the latest developments in risk modelling in Kenya as a tool for understanding and managing severe and long-lasting drought.

14. Plenary presentations were followed by a round-table discussion to identify, from the current practices in participants' countries and organizations, future needs related to possible approaches to address slow onset events, covering the following three aspects: knowledge, coordination and support, including finance, technology and capacity-building.

15. The second part of session 2 focused on perspectives from institutions outside of the UNFCCC process, in particular on how the UNFCCC can create enabling environments and send necessary policy signals for organizations outside of the UNFCCC to further enhance and align their actions for addressing loss and damage associated with climate change impacts, and on ways in which synergy can be increased between different initiatives. The third part of the second session centered on understanding the perspectives of different countries and regional groups.

16. In session 3, breakout groups addressed possible responses, with various time frames, to future needs associated with possible approaches to address slow onset events

¹⁵ FCCC/TP/2013/2.

¹⁶ All of the presentations given at the meeting are available on the UNFCCC website at <<http://unfccc.int/7705>>.

which could be undertaken both by and outside of the UNFCCC. The group discussions were structured around three aspects of possible responses: strengthening the knowledge base, synergizing initiatives and catalysing action and support.

17. Session 4, on moving forward, commenced with the reporting back by the breakout groups on a range of possible responses, which was followed by the reflections, mainly from the technical perspective, of the specialized agencies and organizations that are currently undertaking relevant work on the ground. In session 5, following brief closing remarks made by the co-chairs of the meeting on the three-day discussion, the meeting was concluded.

III. Summary of future needs and key issues addressed at the meeting

18. This chapter first summarizes some of the key contextual points raised at the meeting when considering future needs, including capacity needs associated with possible approaches to address slow onset events. It then highlights key points made on needs relating to: data, information and knowledge aspects of addressing slow onset events (chapter III.B); support, including finance, technology and capacity-building (chapter III.C); and coordination at various levels in addressing slow onset events (chapter III.D).

19. Needs were also explored extensively at a series of expert meetings held in the course of 2012 as part of the implementation of the work programme on loss and damage, including needs related to assessing the risk of loss and damage associated with the adverse effects of climate change (thematic area 1), and those related to approaches to address loss and damage associated with the adverse effects of climate change, including impacts related to extreme weather events and slow onset events, taking into consideration experience at all levels (thematic area 2).¹⁷

A. Introduction

20. It was strongly reaffirmed at the meeting that addressing slow onset events in the context of the deliberations on loss and damage under the UNFCCC is of fundamental importance to developing countries that are particularly vulnerable to the adverse effects of climate change, especially in areas where they experience losses but do not have the capacity to cope or adapt. Though uncertainty associated with slow onset events and impacts remains, the urgency of action was underlined given that certain impacts are already being felt on the ground. While improving understanding is an important stepping stone towards addressing loss and damage associated with slow onset events, it was underlined that insufficient understanding and uncertainty should not be used to justify inaction.

21. Identifying specific future needs, including capacity needs associated with possible approaches to address slow onset events, in a detailed manner is difficult because of the unparalleled nature of the associated challenges and risks, and because subsequent needs are mostly contextual and country-driven. Needs vary depending on countries' circumstances, including the exposure to different types of climate change impacts, the assets that are at risk, the relevant institutional capacities including policy and regulatory frameworks in place, and the availability of resources, among others. This poses a significant challenge when it comes to specifying future needs at the international level. A

¹⁷ For the reports on those expert meetings, see documents FCCC/SBI/2012/INF.3 and FCCC/SBI/2012/29.

sound scientific and knowledge basis is considered to be a key prerequisite for defining needs across countries, rather than specifying future needs on an ad hoc basis.

22. It was also affirmed at the meeting that integrated climate risk management systems are complex to develop, and the importance of recognizing the continuum of change which requires sustainable institutions and support to enable knowledge to be generated to respond to changing needs was highlighted. Challenges are viewed as political, technical and practical as they can generally be related to the following three dimensions: interactions among policymakers, the scientific and research community, or practitioners (responsible for the provision of solutions, including technical support and finance).

23. Considering future needs related to approaches to address slow onset events is further complicated by the unparalleled nature of the challenge of addressing slow onset events. Gradual changes, such as glacial melt, sea level rise, ocean acidification and loss of biodiversity, occur on different time scales. Similarly, society will be changing as countries develop socioeconomically and, accordingly, associated needs will change over time. Considering long-term needs requires a long-term planning horizon, which is often incompatible with the current relatively short policy cycle and the short-term planning cycles of relevant organizations, including the short-term relief efforts of humanitarian agencies.

B. Needs relating to data, information and knowledge aspects of possible approaches to address slow onset events

24. Needs relating to data, information and knowledge aspects of possible approaches to address slow onset events were discussed extensively throughout the meeting. This section first summarizes needs related to observation systems and data collection and sharing, then the main points raised on the significance of translating knowledge into action, followed by a few additional¹⁸ specific areas where further learning is called for.

25. While efforts to share relevant information are ongoing and lessons learned from current experience in relation to slow onset events are emerging, meeting participants noted the complexity of identifying future needs related to possible approaches to address slow onset events. As it is an emerging element to consider or a focal area for many technical agencies and organizations, it is difficult to gauge how much capacity there currently is at the international level to address such needs.¹⁹ Since the specialized agencies may not be, or may not have the mandate of, addressing relevant issues directly, the UNFCCC process was considered to be a helpful space in which to start the conversation thereon, according to some organizations and agencies. Some meeting participants indicated that, while the work programme on loss and damage includes such provisions,²⁰ it has not yet delved sufficiently deeply into addressing loss and damage associated with slow onset events at the technical level.

1. Observation systems and data collection and sharing

26. There was general consensus on the need to improve data availability in order to enable evidence-based policymaking and planning for approaches to address slow onset events. The data required are wide-ranging and include not only longitudinal climate data

¹⁸ In addition to those already identified in decision 3/CP.18 and in the previous documentation under the work programme on loss and damage.

¹⁹ For example, the United Nations Development Programme (UNDP) is increasing its staffing on the ground to support mainstreaming.

²⁰ For example, decision 3/CP.18, paragraph 7.

but also socioeconomic information, including asset mapping. Some of the main issues discussed include:

(a) *Data on the impacts of slow onset events*: practitioners pointed out that data availability is particularly limited on the impacts side, pointing to a need for further improvements in capturing data on climate-induced loss and damage,²¹ including by strengthening the social evaluation and qualitative assessment of non-economic losses. The mapping of climate risks and how they interact with key socioeconomic indicators, such as poverty, health, urbanization, agriculture and policy priorities, was considered useful in collecting relevant data on how the impacts of slow onset events interact with socioeconomic systems. In that context, frameworks that integrate the two types of data (evidence and the qualitative assessment of non-economic losses) were also considered necessary;

(b) *Observation systems*: explaining that models can only be as good as the data that are available, technical experts on models called attention to the value of sound observational infrastructure for both climatic indicators and social indicators. Model outputs can be greatly improved by using better-quality baseline observational data. Noting the relatively better availability of data on the global and regional scales, practitioners stressed the urgency of improving the provision of data on the local scale, including the need to consider local circumstances when using global model outputs;

(c) *Data sharing*: the need to enhance data sharing at the national, regional and international levels was reiterated.²² To facilitate access to data and make databases available within and across countries, high-level national commitment was considered necessary. Related needs expressed in that regard include: establishing or enhancing national-level data clearing houses to compile, update and distribute data; standardizing metadata; and establishing a common data format. Regional approaches to collating data generated by regional and national centres and at the local level were also considered to be an effective way to enhance data sharing;

(d) *Indigenous knowledge*: while some meeting participants underlined the importance of collecting and sharing traditional knowledge, especially in dealing with climate variability, others noted that climate change goes beyond the scope of traditional knowledge and practices.

2. Key knowledge areas

27. Meeting participants noted a range of knowledge areas which need further attention in addressing slow onset events, including:

(a) *Understanding thresholds*: understanding thresholds is fundamental when considering possible approaches to address slow onset events. Issues to be considered are both scientific and political in nature: what is the scientific threshold for climate-related hazards, widely referred to as the tipping point? And which risks of loss and damage associated with slow onset events do communities and societies accept and which do they not? In that context, practitioners drew attention to the critical importance of linking hazard early warnings with identifying the different responses that are required under each

²¹ Some meeting participants highlighted difficulties in capturing data on climate-induced loss and damage, particularly those related to salinization, erosion, ecosystems and desertification.

²² The need to enhance data sharing was extensively discussed at the expert meeting held under the first thematic area of the work programme on loss and damage. For details, see document FCCC/SBI/2012/INF.3.

threshold.²³ To enable that, a series of scenarios is needed that captures the range of potential outcomes of slow onset events in the future, in order to understand the impacts on people and livelihoods, with a view to building them into a conceptual framework, policy and planning as a guide for different countries and regions or circumstances to target specific slow onset events;

(b) *Different sources of uncertainty*: continuing to study how different sources of uncertainty interact and how to factor them into the planning process was viewed as another requirement when considering possible approaches to address slow onset events.²⁴ Further learning is necessary to identify and reform current practices which may become unsustainable with increased impacts of slow onset events;²⁵

(c) *Transformational approaches*: though the term is associated with potential responses to slow onset impacts of climate change, the concept and how they are applied on the ground may not always be clear from the technical perspective. In that regard, some meeting participants highlighted a need for further in-depth technical inputs in relation to transformational responses to slow onset events;

(d) *Insurance tools*: risk insurance is an important approach and meeting participants stressed the need to learn from existing experience in order to identify what works as well as the specific contexts in which such tools are effective. This was seen as important in order to ensure that risk transfer tools, such as index-based insurance, are the right tools for addressing specific needs and are combined with other instruments as part of a broader risk management approach, because a lot of impacts related to slow onset events are not a question of probability (i.e. whether they will occur), which is a key factor in designing insurance;

(e) *Approaches to address permanent losses and irreversible damage*: meeting participants, especially those from developing countries, raised concerns over possible ways to address potential permanent losses and irreversible damage caused by climate change. This requires further understanding of innovative approaches, such as rehabilitation measures, from the technical perspective to achieve conceptual clarity.²⁶ Ways in which such loss and damage could be compensated may also warrant further exploration, including ways to disentangle the roles of social safety nets and protection in addressing such loss and damage;

(f) *Focused learning*: meeting participants generally agreed that more focused discussion is needed on the different types of impacts of slow onset events (e.g. ocean acidification), and the associated approaches to address them, by bringing in technical experts on such issues from wider stakeholder groups. At the same time, meeting in a collective arena was considered important to enable the sharing of experiences across regions and themes.

²³ For instance, loss and damage which can be anticipated progressively as the event unfolds would necessitate a different nature of response from the risk of major change following a threshold such as a reef collapse.

²⁴ For example, there is much more certainty about global climate change and sensitivity than continental changes, including in terms of impacts. Also, the uncertainties are much higher with regard to precipitation than for temperature.

²⁵ For example, drought relief efforts that keep farmers on land that would not be considered arable in the long run.

²⁶ Some meeting participants pointed out that rehabilitation refers, in the emergency response field, to a post-disaster response, while in the engineering field, it indicates measures taken before disaster occurs. It further differs in the context of the ecosystem-based approach.

3. Turning knowledge into action

28. *Translating knowledge into decision-making*: translating technical information, such as the assessment of the actual and potential loss and damage associated with slow onset events, into decision-making for action to manage climate-related risks is another area which needs immediate attention. In particular, meeting participants pointed out the difficulties faced by local governments in understanding and using regionally and nationally generated data as actionable information. To that end, it is necessary to identify entry points within decision-making systems and the timing of policy interventions, which would also enable coordinated assistance. There was general consensus that improving the existing policy systems to move beyond short-term planning cycles also requires immediate attention in this regard.

29. *Awareness-raising*: meeting participants underscored a need to build public awareness, including among high-level policymakers, regarding slow onset events and the associated loss and damage. To meet such a need, the elaboration of strong communication strategies and cross-regional learning through the replication of knowledge systems and targeted training, including introducing information on slow onset events into curricula, were deemed useful.

30. *Balancing uncertainty and action*: efforts to advance the assessment of the risk of loss and damage associated with slow onset events, as an emerging area for policy responses, inevitably generate further research questions. However, while recognizing the utmost importance of evidence-based policymaking, many meeting participants repeatedly called for balancing addressing knowledge needs with conducting immediate action on the ground to manage the impacts associated with slow onset events, stressing that building resilience is an iterative process which can be supported by the evolving science and continuous learning.

C. Needs relating to support aspects, including finance, technology and capacity-building, of possible approaches to address slow onset events

1. Finance

31. Recognizing the long-term nature of slow onset events and their impacts, the meeting participants agreed that sustained funding support is needed. Implying that long-term financing currently available under the Convention does not address needs arising from slow onset events and that there is currently no mechanism in place to address such needs, some participants identified arranging for enabling and flexible financial mechanisms as an integral part of future needs.

32. Owing to the diverse range of climate risks and impacts that developing countries are concerned with in relation to addressing slow onset events, a suite of financial options is needed. To that end, involving experts in creating financial instruments and tools was considered vital by many of the meeting participants when exploring options to address loss and damage associated with slow onset events. Some of the specific points raised in relation to the financial aspect of support include:

(a) *Financial services for transferring risk*: in terms of enabling risk transfer approaches to address loss and damage, the timeliness of the provision of financial support is considered highly critical in order to reduce the repercussions of volatility caused by climate change stressors. Securing funding for the long-term collection of baseline data and installing adequate distribution channels for services are also viewed as prerequisites for operationalize insurance tools;

(b) *Financial support for compensation*: the discussion on future needs related to financial support also covered specific needs related to addressing ways to compensate for loss and damage associated with climate change impacts in the countries that contribute little to the cause of climate change. Needs arising in that regard could include setting up a compensation fund and/or a compensation insurance arrangement under the Convention. On the other hand, while recognizing the importance of addressing the compensatory aspect of the issues, views were also expressed indicating that the UNFCCC is not an appropriate realm for the provision of such support.

2. Technology

33. Although the provision of technical and technological support for early warning and response²⁷ is considered critical, the discussion on future needs in terms of support for technology associated with possible approaches to address slow onset events remained at a general level, reflecting the challenge of considering a range of slow onset events in any depth during a single meeting.

34. Most of the specific needs identified with regard to support related to technology center around the need to build systems for monitoring the expected impacts of climate change, such as the development of a standardized template for monitoring slow onset impacts of climate change, and the development and transfer of technology for assessing the impacts related to glacier retreat, including related impacts on other systems, and ocean acidification, which is often seen as the slow onset event on which the least amount of information is available, especially in the Pacific.

35. Direct technology support to help developing countries build technical infrastructures to improve their data collection and analysis was highlighted as another broad area in need of further support.

3. Capacity-building

36. Capacity issues at the policy and planning levels as well as at the operational level were addressed at the meeting. However, similar to the discussion on technology needs, the consideration of needs for support in relation to capacity-building for addressing slow onset events was of a general nature.

37. There was consensus that enhanced capacity is needed at all levels to develop relevant knowledge,²⁸ to effectively apply that knowledge (e.g. the capacity of developing countries to process and interpret climate information, including model outputs) and to implement approaches to address slow onset events in the face of uncertainties.²⁹ In addition, the building of the capacity to determine the appropriate combinations of approaches (e.g. incentivizing loss reduction versus risk transfer, social safety nets and wider resilience-building efforts, etc.) requires further attention, illustrating the complexity of developing a comprehensive risk management approach.

38. As the consideration of slow onset events and their impacts within the planning process is an emerging focal area for developing countries, meeting participants acknowledged that a fundamental capacity need still exists in terms of enabling those

²⁷ Some of the examples mentioned at the meeting of being in urgent need of enhanced early response include: drought in the Pacific, glacial lake outburst floods in Nepal, monitoring soil salinity in arid and semi-arid lands, and monitoring the level of carbon dioxide in the Pacific in order to plan and move shellfish hatcheries.

²⁸ See chapters II.B.1 and II.B.2 for the needs related to types of knowledge.

²⁹ See chapter II.B.3 for discussion on translating knowledge into action.

countries to articulate their needs (in assessing and managing assets at risk due to slow onset events).³⁰

39. It was noted that sustained efforts to enhance capacity at the national and local levels are indispensable given the long-term nature of the issue and as the formulation of plans and the implementation of measures are carried out at those levels. The institutional capacity-building of regional organizations is another element which was identified as in need of further enhancement. Some additional specific support needs for capacity-building discussed include:

(a) *At the local level:* specific legislative support for local governments from the higher levels of government (e.g. the preparation of local adaptation plans), and support for enabling local governments to communicate relevant climate information to the local communities in effective ways, thus leading to early action, including ensuring direct access to information by locally based scientific advisors;

(b) *At the national level:* in addition to building in-country capacity to formulate adequate policies and frameworks for action, including contingency plans, some meeting participants drew attention to shortcomings relating to the capacity to enforce them in the light of other competing national priorities, such as those related to socioeconomic development. Financial management capacity to ensure the effective usage of resources was another area where further attention was thought to be valuable;

(c) *At the regional level:* addressing the impacts of slow onset events often requires transboundary consideration (e.g. glacial management in one country has an impact on its neighbour(s)). In that regard, enhancing the capacity for regional networks and coordination channels was called for to enable an effective regional approach. In addition, many of the meeting participants highlighted the usefulness of South–South exchange and learning as part of approaches to address slow onset events.³¹ The participants generally agreed that regional organizations play a crucial role in that regard;

(d) *At the international level:* the majority of the meeting participants viewed the capacity concerns at the international level in its function:

(i) As a clearing house to provide guidance on the identification of appropriate combinations of approaches and of arrangements that are appropriate in different contexts (including elements that limit the ability to plan and implement adaptation) in dealing with loss and damage associated with slow onset events;

(ii) To facilitate the identification of needs of countries and ways to address them;

(iii) To strengthen regional organizations and enhance collaboration between them and governments or other institutions.

D. Coordination needs at various levels in addressing slow onset events

40. To ensure policy coherence across different sectors and at different levels, it was affirmed that enhancing coordination is a key cross-cutting need in relation to all aspects of addressing slow onset events considered at the meeting. Institutional alignment across

³⁰ Some donor countries indicated that this would help to coordinate their funding for support.

³¹ As an example, Jamaica, a Caribbean country, has been developing strategies to address the risk of hurricanes. However, when drought hit the country last year, it acknowledged that knowledge and experience relating to drought risk assessment and management, for example from African countries, would have been very helpful.

disciplines, scales and frameworks³² is vital in order to ensure the sustainability and alignment of resource allocation and engagement for maximum impact, as there is currently no provision for stakeholders to discuss issues related to addressing slow onset events in a coherent manner.

41. Many practitioners were of the view that the relevant discussions are just beginning and that the UNFCCC is creating momentum because it operates by building consensual understanding around an issue in order to define the norms for ways in which it should be addressed, which then drives national governments and other stakeholders to take action.

42. Needs for coordination at the regional and international levels centre on improving the coherence of existing policies and their implementation, with a view to incentivizing the overall reduction of risk and embedding risk management into wider resilience-building efforts. The implication of such needs on the ground is extensive, including:

- (a) Facilitating the generation and dissemination of knowledge;
- (b) Creating a stronger linkage between research and policymaking;
- (c) Linking different frameworks and initiatives and engaging a wide range of relevant stakeholders, including promoting the engagement of the private sector, such as in developing tools that would apply to different types of approaches and in enhancing early warning systems;
- (d) Incentivizing the consideration of the environmental and social dimensions, such as promoting support for the establishment of social safety nets and social safety programmes to address loss and damage in relation to livelihoods;
- (e) Bridging time scales in financing programmes and projects and improving the coherence of finance for addressing slow onset events through, for instance, a clearing house function, or creating a central database to develop and share information on finance for addressing slow onset events.

43. Other key issues specifically raised regarding needs for international coordination include streamlining the communication and reporting mechanisms under the Convention and other Rio Conventions and other international programmes (e.g. Hyogo Framework for Action) and synergizing the generation and dissemination of data and information (e.g. that under the Convention on Biodiversity process). While some country representatives indicated potential benefits to establish a central institution to address climate change impacts, expressing that numerous reporting requirements prevent countries with limited capacity from focusing on addressing the pressing issues at hand, some practitioners, though recognizing the need for improved coordination, remained cautious, taking into account the existing agreements and mandates for different institutions.

Coordination specifically at the national level

44. When considering coordination needs at the national level, meeting participants frequently noted the importance of acknowledging the different level of 'maturity' in terms of internal coordination to address climate change impacts, especially those related to slow onset events. In some countries the foundation for a coordination mechanism exists but needs to take into account the impacts of slow onset events more effectively, while in other countries such a national platform does not even exist.

45. Taking a participatory approach was considered useful for the coordination of expertise within a country. Drawing from experience gained from the national adaptation

³² For example, the Cancun Adaptation Framework, the Hyogo Framework for Action (see <<http://www.unisdr.org/eng/hfa/hfa.htm>>), the Global Framework for Climate Services, sectoral efforts, regional-level schemes, various modalities for planning at the national level, etc.

programme of action (NAPA) process, some country representatives echoed the importance of participatory scenario planning to help relevant institutions within countries understand how climate stressors affect the mandate and capacity of their institutions,³³ and allowed for different sectors to integrate the impacts associated with slow onset events in their work.

46. Drawing on current good practices whereby aid coordination bodies and committees exist within ministries of finance,³⁴ some meeting participants noted a need for improvement in funding streams at the national level to increase the effectiveness of scarce resources. Similarly, others identified a need for donor countries to coordinate their funding support in that regard.

Issues beyond coordination

47. Although links and significant overlaps exist between risk management, reduction, transfer and adaptation work, which warrant further coordination, much of that work is not specifically addressing the slow onset impacts of climate change, including measures to address non-economic losses. To that end, some meeting participants drew attention to the limits to what coordinated action can achieve, as such an integrated approach will not suffice in addressing some of the most challenging types of impacts related to slow onset events, such as permanent losses (versus recovery), for instance when territories become uninhabitable due to sea level rise.

IV. Summary of the potential responses that can be undertaken under and outside of the UNFCCC process

48. A range of potential responses that can be undertaken by the UNFCCC, as well as generally by organizations and within processes and frameworks outside of the UNFCCC, in meeting future needs associated with possible approaches to address slow onset events was identified at the meeting. The potential responses listed in this chapter do not necessarily represent the ways forward agreed upon by all meeting participants, but rather represent the range of views put forward at the meeting.

49. Key common elements which were emphasized in considering the responses were: that there must be flexibility, allowing for an iterative process to ensure that potential responses can accommodate evolving needs in an effective manner; and the paramount importance of the provision of sustained support arrangements, including financing, which requires a shift in thinking from the ad hoc or reactive mode of disaster response and management and coping strategy to date to one of a precautionary, sustainable or permanent nature.

A. Potential responses to be undertaken by entities and within processes outside of the UNFCCC process

50. Owing partially to the generally low level of specificity of the discussion, the extent to which specific responses could be identified for particular entities, processes or frameworks was limited. The political nature of addressing slow onset events within the UNFCCC process appeared, to some extent, to prevent some technical inputs from being raised candidly.

³³ Examples from the development of NAPAs and national adaptation plans (e.g. agricultural policy, forestry policy, food security policy, poverty reduction policies, sectoral policies and economic planning) were highlighted.

³⁴ Examples given during the round-table discussion concerned Rwanda and Vanuatu.

51. Regional organizations, in their unique position of being able to build local and national capacity, are considered to potentially play a key role in addressing future needs related to slow onset events. They can optimize and pool resources to serve a region, as often relevant issues require subregional or transboundary measures. Regional centres were also considered to be able to contribute to retaining technical capacity and human resources within the region.

52. In general, meeting participants envisioned targeted and specific actions to be best carried out by specialized agencies, such as famine response, drought response or insurance measures. Some representatives of Parties indicated the potential response of implementing agencies (national and international) to include guaranteed multi-year funding for related projects (e.g. food security and soil conservation), sustained engagement and guidance on climate financing.

53. While supporting such ideas, representatives of organizations drew attention to the fact that the majority of organizations do not have a sustainable approach to responding to climate-related crises in the long term, but instead take a reactive, ad hoc or short-term approach, owing to the lack of guaranteed long-term funding. This was echoed by most organizations. They noted that what would facilitate specialized organizations in enhancing their action is policy signal and associated financing, in order to translate their expertise into action on the ground. Additionally, it was noted that sustained funding could allow space for implementing agencies and implementers to innovate, which is an important undertaking in an emerging area of work such as addressing slow onset climate events and their impacts.

54. A rather limited number of specific, actionable responses to identified future needs were put forward, including:

(a) The Intergovernmental Panel on Climate Change to issue a special report on slow onset events;

(b) The World Meteorological Organization to enhance the dissemination of information on climate data related to assessing the impacts of slow onset events to national- and regional-level stakeholders, and to identify entry points for synergies with the Global Framework for Climate Services;

(c) The establishment of platforms at the regional, national and community levels to coordinate efforts;³⁵

(d) National and research agencies to enhance work on educating practitioners on slow onset events in their countries and regions.

55. With regard to enhancing coordinated efforts to address future needs associated with slow onset events, representatives of organizations drew attention to the crucial steps in defining a process (under the UNFCCC) for engaging institutions outside of the UNFCCC, and in further clarifying concrete outcomes that Parties expect from those entities outside of the UNFCCC.

B. Potential responses to be undertaken by the UNFCCC process

56. The meeting participants generally agreed that it is important that the UNFCCC, as the international process on climate change, uphold a concrete vision to galvanize action by outside processes on addressing future needs associated with slow onset events. They also

³⁵ An example shared at the meeting was of the Joint National Action Plans on Disaster Risk Management and Climate Change in the Pacific.

acknowledged that the UNFCCC process enables the consideration of climate change holistically in a continuum, from emission reduction to managing the full range of impacts.

57. The absence of instruments or a process or mechanism under the Convention to address loss and damage associated with slow onset events in a systematic and structured manner was strongly reiterated by vulnerable developing countries. This is partly because those countries are turning to the UNFCCC because their means are limited to managing the foreseeable risks of slow onset events, including retaining the cost of damage in national accounting. It was noted that the countries most affected by the severe impacts of climate change are often the least responsible for climate change. Accordingly, there was an urgent call for addressing this gap as a future need.

58. While, for some meeting participants, the UNFCCC merely plays a catalytic role in enhancing action, including for the efficient development and operationalization of the relevant provisions from COP 18,³⁶ others envisaged the UNFCCC to have an implementation role as well. At times, there was no clarity on this distinction when potential responses to be undertaken by the UNFCCC were being discussed. Accordingly, the list of responses contained in this section covers both roles, sometimes without distinction.

59. This section summarizes key potential responses and associated activities and actions to address future needs related to potential approaches to address slow onset events within the UNFCCC process according to the three roles of the Convention, as identified by the COP, in promoting the implementation of approaches to address loss and damage, namely:³⁷ (a) enhancing knowledge on and understanding of comprehensive risk management approaches (see para. 60 below); (b) strengthening dialogue, coordination, coherence and synergies among relevant stakeholders (see paras. 61 and 62 below); and (c) enhancing action and support (see paras. 63 and 64 below). The last subsection lists limited views on modalities and arrangements for how such responses could be delivered.

1. Enhancing knowledge on and understanding of comprehensive risk management approaches

60. Potential actionable ways forward under the UNFCCC in terms of addressing needs related to enhancing knowledge on and understanding of comprehensive risk management approaches can be generally summarized as:

Enhancing understanding of the risk of slow onset events

(a) Providing leadership globally and regionally in improving the documentation of all available methodologies, and producing a report to provide information on available tools and methods to assess loss and damage associated with slow onset events;

(b) Providing guidance, guidelines, standards, tools, methodologies and information on good practice examples, including for trigger setting,³⁸ with a view to enhancing understanding of social safety nets and social protection in the context of loss and damage associated with slow onset impacts;

(c) Facilitating the establishment of open-source models and data;

(d) Promoting a consistent method for assessing impacts of slow onset events;

Awareness-raising

³⁶ Decision 3/CP.18.

³⁷ Decision 3/CP.18, paragraph 5.

³⁸ The facilitation of reaching consensus on triggers and the joint understanding of subsequent responses, in order to agree on what risk tolerance and a trigger response process would be.

(e) Raising the awareness of implementers, including setting short- and long-term priorities as a precursor to action, and translating science for policymaking;

(f) Developing risk landscapes, such as identifying specific risks and impacts of slow onset events that individual countries are facing and then assisting countries in prioritizing actions at the national, regional and international levels. This could take the form of a catalogue of impacts by country;

Further steps towards managing risks

(g) Identifying the interaction of slow onset events with other environmental factors and stresses in order to evaluate loss and damage and identify appropriate response approaches;³⁹

(h) Developing methodologies, to be used as a global standard, for evaluating the risk of loss and damage at the national and local levels in collaboration with other relevant organizations.⁴⁰

2. Strengthening dialogue, coordination, coherence and synergies among relevant stakeholders

61. In leading an international dialogue to strengthen coherence in addressing needs associated with the slow onset impacts of climate change, potential ways forward include:

(a) Linking existing agencies and entities outside of the UNFCCC, including financial institutions, regional organizations and networks, and other relevant stakeholders, including the private sector, in order to foster partnerships and to promote coherent and evidence-based policymaking and planning in addressing slow onset events;⁴¹

(b) Promoting institutional alignment across scales, sectors and processes with a view to streamlining reporting as well as the dissemination of knowledge and information relating to different aspects of addressing slow onset events;

(c) Providing space for engaging with ongoing policy processes (e.g. the post-2015 development agenda) to promote synergies.

62. In terms of specific activities, some meeting participants proposed inviting targeted submissions from international organizations containing information on how their work contributes to addressing specific sets of needs related to loss and damage associated with slow onset events.

3. Enhancing action and support

63. With regard to enhancing action for addressing future needs related to possible approaches to address slow onset events, potential actionable ways forward under the UNFCCC include:

(a) Providing financial support to technical agencies to develop more precise relevant information;

(b) Developing financial instruments to help cope with slow onset impacts where insurance, for example, is not appropriate;

³⁹ For example, identify the interaction between land and forest degradation and heat stress, and then which approaches to addressing the associated loss and damage would be most appropriate.

⁴⁰ Concerning setting default methodologies, the example was given of greenhouse gas inventories, for which methodologies were developed by the UNFCCC.

⁴¹ For instance, some meeting participants identified collaboration with Global Observing Systems Information Centre for addressing impacts associated with ocean acidification as a useful way forward.

(c) Providing initial capitalization for risk finance for managing the impacts of slow onset events;

(d) Making provisions for identifying a suite of options for financial measures, including sustainable sources of funding, and examining the role of finance in addressing loss and damage related to slow onset events, with a view to channelling funds to enable countries to access finance for various approaches;

(e) Setting up examples of ‘loss and damage platforms’ at the regional and national levels, which can be utilized to share data, information and knowledge, including through South–South learning, as well as being a meeting place for fostering collaborative measures;

(f) Creating space for reporting, monitoring and tracking slow onset events and impacts with a view to identifying further action;

(g) Encouraging technology needs assessments (TNAs) to define which monitoring systems are required for slow onset events;⁴²

(h) Supporting relevant training at the regional level;

64. With its catalytic role, specific areas for the engagement of the UNFCCC in enhancing support and action include:

(a) Removing barriers in systems and decision-making processes to the implementation of existing tools;

(b) Engaging the private sector in developing a suite of toolkits for climate-risk financing in developing countries;

(c) Enhancing its clearing house role in identifying sources of support.

4. Delivering modalities and arrangements for potential responses

65. Meeting participants acknowledged the importance of reflecting the permanent nature of the issues related to the impacts of climate change by considering delivering modalities and arrangements for potential responses. In terms of institutional design, many of the participants stressed the importance of flexibility and inclusiveness (for all Parties, taking into account the vulnerability of small island developing States and the least developed countries), as such institutions will need to evolve as the needs of countries change. Allowing for countries to determine their own needs is another aspect seen as vital.

66. Discussion on delivering modalities to operationalize potential responses was limited during the meeting and there was no extensive exchange of views on the few ideas put forward. Some of the specific ideas and related discussions include carrying forward through an entity with a group of people: for example, a loss and damage committee or expert panel or an executive body on loss and damage, under the COP or as a standing task force⁴³ under the Adaptation Committee.

67. In this regard, some of the related issues for further consideration include: defining relationships with other entities, such as the COP, constituted bodies under the Convention (e.g. the Adaptation Committee and the Climate Technology Centre and Network (CTCN)), external bodies and national governments. In relation to the option of a standing task force under the Adaptation Committee, a question of feasibility was raised in relation to the

⁴² Some meeting participants specifically questioned the feasibility of this as TNAs have a limited focus on adaptation and the capacity of UNDP and United Nations Environment Programme, which support TNA development, is also limited. Thus, it was argued that this needs to be part of broader coherent efforts to build adequate momentum.

⁴³ Task force does not imply an interim nature of the body.

overwhelming agenda and existing capacity of the Adaptation Committee should such an entity be placed under it. Additionally, it was noted that the members of such an entity should not be composed of only members of the Adaptation Committee.

68. Broadly another set of views on operationalization of potential responses was through arrangements with direct implementation capabilities to address a full range of loss and damage associated issues, guided by the COP. An international mechanism proposed by AOSIS⁴⁴ was referenced to explain this type of approach.

69. Varying ideas on such arrangements can generally be summarized as to include three focus areas of work: namely risk management, insurance, and measures to address slow onset events, supported by technical and guiding bodies under the COP. In this regard, issues for further clarification raised at the meeting, include: how to create such bodies; clear aims for each focus area of work and the bodies; how to facilitate support for action to deliver responses; clarification of scientific and technical requirements; and how to promote linkages and synergies with entities under and outside of the Convention as well as across different governance levels.

70. Discussion was also limited in terms of ways to further utilize existing bodies and processes under the Convention in addressing future needs associated with slow onset events. A few examples highlighted include:

- (a) Mobilizing appropriate support and resources through CTCN in addressing loss and damage associated with climate change impacts;
- (b) Building on existing efforts related to the National Adaptation Plans (NAPs) process to develop knowledge on loss and damage. In that regard, some participants pointed out that the NAP process may represent an opportunity at the national level to start addressing knowledge and capacity needs, but not directly so at the regional or international level;
- (c) Carrying out pilot initiatives under the work programme of loss and damage.

V. Concluding remarks

71. The meeting identified some broad convergence in furthering the deliberations on loss and damage, including:

- (a) More focused discussion on possible approaches to address slow onset events in accordance with the specific needs and concerns of countries as well as the different types of impacts of slow onset events, with the greater engagement of relevant technical experts on the respective issues from wider stakeholder groups;
- (b) A concrete vision of the UNFCCC to lead the work on addressing slow onset events, and the instigation of action by outside processes in attending to future needs related to addressing slow onset events;
- (c) Taking a long-term and comprehensive perspective with flexibility in planning, policymaking and developing approaches to address slow onset events;
- (d) Further knowledge sharing and technical collaboration, including South–South exchange and learning, and the strengthening of regional organizations given their crucial role in that regard;

⁴⁴ Originally introduced in their submission under the Ad Hoc Working Group on Long-term Cooperative Action under the Convention.

- (e) Improved provision of data to enable evidence-based policymaking and planning for addressing slow onset events;
 - (f) Enhanced capacity to develop relevant knowledge and effectively apply that knowledge for implementation even in the face of uncertainties;
 - (g) Sustained support, including finance.
-